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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/19/2001

Naoto Kinjo

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08/10/2005

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EXAMINER

LE, BRIAN Q

ART UNIT

PAPER NUMBER

2623

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/981,920

Applicant(s)

KINJO, NAOTO

Examiner

Brian Q. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Response to Amendment and Arguments

1. Applicant's amendment filed April 20, 2005, has been entered and made of record.
2. The rejection of claims 1 and 4 under 35 U.S.C. 112, second paragraph is withdrawn. In addition, the objection of claims 1, 2 and 4 are also withdrawn.
3. Applicant's arguments with regard to claim 1 have been fully considered, but are not considered persuasive because of the following reasons:

Regarding claim 1, The Applicant argues (page 12 of the remark) that the algorithm taught by Friedmand to calculate hash is not confidential/secret. The Examiner respectfully disagrees. First, the Applicant does not claim this limitation in the claim's language. Second, Friedmand also teaches this concept (secure hash image/maintain the algorithm secret) (at FIG. 3C, element 20; FIG. 3B, element 12 and column 10, lines 28-31. Similarity, Applicant's arguments (page 13) are irrelevant because the concepts are not claimed. The Applicant seems to argue the differences between two disclosures (Applicant's specification verse Friedmand's teaching) and not the claiming language. The Applicant must further amend the claims to include these concepts into the claims for further consideration. To further assist the Applicant with the guidance with claim language interpretations so that the Applicant can add further/more details limitations from the specification to the claims to overcome the prior arts, the Examiner is presenting MPEP, section 2111, Claim Interpretation; Broadest Reasonable Interpretation as follow: "The court explained that "reading a claim in light of the specification, to thereby interpret limitations explicitly recited in the claim, is a quite different thing from reading limitations of the specification into a claim,' to thereby narrow the scope of the claim by implicitly adding disclosed limitations which have no express basis in the claim." The court

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found that applicant was advocating the latter, i.e., the impermissible importation of subject matter from the specification into the claim.). See also *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997) (The court held that the PTO is not required, in the course of prosecution, to interpret claims in applications in the same manner as a court would interpret claims in an infringement suit. Rather, the "PTO applies to verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in applicant's specification."").

4. Applicant's arguments, see "Remarks", filed April 20, 2005, with respect to the rejection(s) of claim(s) 8-9 under 35 U.S.C 103(a), Official Notice, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent 5,499,294 to Friedman.

5. Applicant's arguments, see "Remarks", filed April 20, 2005, with respect to the rejection(s) of claim(s) 4 regarding to the "exact matching between the data is not required" have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent 5,875,249 to Mintzer et al..

6. Applicant's argument, see "Remarks", filed April 20, 2005, with respect to Fredlund and Hamilton art rejections have been fully considered and are persuasive regarding the prior art disqualification. The rejections using Fredlund and Hamilton have been withdrawn.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,499,294 to Friedman.

As to claim 1, Friedman discloses a method of preventing falsification of an image of a produced image produced in an imaging apparatus comprising the steps of:

extracting a first image characteristic amount (column 4, lines 33-37; the hash is the image characteristic amount), by using one randomly selected algorithm from of a plurality of algorithms in each photographing session (Friedman discloses a calculating hash using a predetermined algorithm (abstract). Friedmand further discloses that it is well known that hash calculation can be calculated by various algorithms (column 3, lines 27-40). Thus a hash calculation by a predetermined algorithm is "randomly selected algorithm");

recording identification information of said produced image in said imaging apparatus and said first image characteristic amount into a database of an authentication section which

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authenticates a status that there is no falsification in said produced image (column 4, lines 43-45; the public key is the identification information, the public key is stored with the encrypted hash);

requesting authentication of an object image to said authentication section, extracting a second image characteristic amount by said specified algorithm from said authentication object image (column 6, lines 23-29);

extracting a second image characteristic amount by using said randomly selected algorithm from said object image (providing the true hash using public key as randomly selected algorithm) (column 4, lines 47-54);

comparing said first image characteristic amount with said second image characteristic amount, in which said extracted authentication data and said authentication data recorded in said database have the same identification information (column 6, lines 23-51); and

judging whether or not said object image is falsified after said image production, based on consistency between said first and second image characteristic amounts acquired from said comparison in order to prevent said falsification of said produced image based on said judgment (column 6, lines 23-51).

As to claim 2, Friedman discloses the method according to claim 1, wherein said imaging apparatus has a camera (Fig.3A), in which said produced image is a photographic image photographed by said camera, in which said identification information is at least an identification information of a file name of said photographic image or an identification information for a photographer of said photographic image (column 4, lines 42-43; since the public key is unique to the camera, it identifies the camera).

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9. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,875,249 to Mintzer et al.

As to claim 7, Mintzer discloses a method of preventing falsification of a produced image produced in an imaging apparatus, comprising the steps of:

sending authentication data from an authentication section for authenticating a status that there is no falsification in a produced image which is produced by said imaging apparatus to said imaging apparatus (column 6, lines 43-47),

recording said authentication data and identification information for identifying said produced image of said imaging apparatus into a database in said authentication section (column 6, lines 36-38),

attaching said authentication data to said produced image or embedding said authentication data into said produced image, when said imaging apparatus produces said produced image, extracting said authentication data from an authentication object image which has been requested to be authenticated in said authentication section (column 6, lines 25-27),

comparing said extracted authentication data with said authentication data recorded in said database, in which said extracted authentication data and said authentication data recorded in said database have the same identification information, (column 6, lines 57-64) and

judging whether or not said authentication object image is falsified after said image production, based on consistency between said extracted authentication data and said authentication data acquired from said comparison in order to prevent said falsification of said produced image based on said judgment (column 6, lines 57-64).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedman.

As to claims 3 and 6, Friedman does not disclose that the imaging apparatus is a computer. However, the Examiner takes Official Notice that using computers as imaging apparatus is well known in the art. It would have been obvious to one of ordinary skill in the art to adapt Friedman's invention to a computer imaging apparatus because of the proliferation of computers in the art of image processing.

12. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Friedmand and U.S. Patent No. 5,875,249 to Mintzer.

As to claim 4, Friedman discloses a method of preventing falsification of an image produced in an imaging apparatus, comprising the steps of:

producing an image to acquire a first image data of the produced image (column 5, lines 53-56),

recording identification information for identifying said produced image and said first image data of said produced image into a database in an authentication section which authenticates that there is no falsification in said produced image (column 4, lines 43-45; column 5, lines 61-63),

comparing an extracted second image data of authentication object image which has been requested to be authenticated by said authentication section, with said first image data recorded in said databases in the said authentication section, in which said extracted authentication data and said authentication data recorded in said database have the same identification information (column 6, lines 2-51; here the image data are compared by comparing their hashes, i.e., characteristic amounts), and

judging whether or not said authentication object image is falsified after said image production, based on consistency between said first and second image data acquired from said comparison in order to prevent said falsification of said produced image based on said judgment (column 6, lines 2-51),

However, Friedman does not explicitly teaches the comparison judgment process wherein when looking at the consistency the exact matching between the data is not required. Mintzer further teaches a method of images authentication and verification wherein the comparison judgment step looking at the consistency the exact matching between the data is not required (the matching process wherein the difference can be acceptable by the pre-defined threshold) (column 9, lines 22-31). Modifying Friedman's method of preventing falsification of image production according to Mintzer would able to allow consistency tolerance in matching data. This would improve processing and therefore, it would have been obvious to one of the ordinary skill in the art to modify Friedman according to Mintzer.

Regarding claim 5, Friedman discloses the method according to claim 4, wherein said imaging apparatus has a camera (Fig.3A), in which said produced image is a photographic image photographed by said camera, in which said identification information is an identification

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information of said camera or a file name of said photographic image or an identification information a photographer of said photographic image (column 4, lines 42-43; since the public key is unique to the camera, it identifies the camera).

13. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Mintzer and Friedman.

As to claim 8, Mintzer does disclose that said imaging apparatus has a camera, in which said produced image is a photographic image photographed by said camera. Friedman further teaches the image apparatus comprises a digital camera (FIG. 3A, element 11) for identification information or a file name of said photographic image (hash file/computer file for images) (column 3, lines 60-65 and column 4, lines 30-40). Modifying Mintzer's method of preventing falsification of image production according to Friedman would be able to utilize such an imaging apparatus as a camera due to its convenience, as well as the added benefit of providing authentication to the camera. This would improve processing and therefore, it would have been obvious to one of the ordinary skill in the art to modify Mintzer according to Friedman.

As to claim 9, similar as discussed in claim 8, Friedman further teaches a computer to process the claimed limitation (column 9, lines 60-65).

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

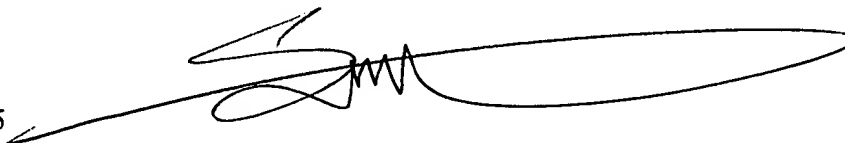
Contact Information

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Q Le whose telephone number is 571-272-7424. The examiner can normally be reached on 8:30 A.M - 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 571-272-7414. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 571-273-8300 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

BL
July 27, 2005

A handwritten signature in black ink, appearing to read 'SAMIR AHMED', with a long horizontal flourish extending to the right.

**SAMIR AHMED
PRIMARY EXAMINER**